CEQA Environmental Checklist and Determination

Sedimentation/ Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan

The California Regional Water Quality Control Board, Colorado River Basin Region (Regional Board) is the Lead Agency responsible for evaluating potential environmental impacts of the proposed amendment to the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) incorporating a **Sedimentation/ Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan**.

The Secretary for Resources certified the basin planning process as exempt from certain requirements under the California Environmental Quality Act (CEQA), including preparation of an environmental impact report [Title 14, California Code of Regulations, Section 15251(g)]. The TMDL technical report and its supporting documents are a proposed amendment to the Basin Plan, and, therefore, are part of the basin planning process. Thus, the proposed amendment is considered functionally equivalent to an environmental impact report. Included in the functionally equivalent amendment are the:

- Basin Plan Amendment
- Regional Board Resolution
- TMDL Technical Report, with Economic Analysis
- CEQA Environmental Checklist and Determination
- Natural Environment Study

Any regulatory program of the Regional Board certified as functionally equivalent, however, must satisfy the documentation requirements of Title 23, California Code of Regulations, Section 377(a), which requires an Environmental Checklist with a description of the proposed activity and a determination with respect to significant environmental impacts. This information is presented below.

Project Title
Amendment to the California Regional Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) to establish the Sedimentation/ Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan

Lead Agency Name and Address
California Regional Water Quality Control Board, Colorado River Basin Region
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Palm Desert, CA 92260

Contact Person and Phone Number
Teresa Gonzales, Environmental Scientist, (760) 776-8931

Project Location
Colorado River Basin Region (southeastern California), Imperial County

Project Sponsor's Name and Address
See lead agency

General Plan Designation
Not applicable

Zoning
Not applicable

Project Description
The Imperial Valley drains are listed as impaired by silt on the State of California's Clean Water Act Section 303(d) List. Accordingly, the proposed Basin Plan Amendment addresses this issue by establishing the Sedimentation/ Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice Drains, and Implementation Plan. The TMDL Implementation Plan requires that responsible parties implement Best Management Practices (BMPs) in accordance with a time schedule to address the impairment. The Basin Plan is applicable to the Colorado River Basin Region of California, as set forth in the California Water Code, Division 7, Section 13200(i).

Surrounding Land Uses and Setting
The project area is located in southeastern California. The amendment applies to agricultural land in Imperial Valley.

Other Public Agencies Whose Approval Is Required (for Permits, Financing Approval, Participation Agreement, Etc.)
None

Environmental Factors Potentially Affected
The environmental factors checked below involve at least one impact that may be potentially affected by the project, as indicated by the checklist on the following pages.

☐ Aesthetics	☑ Agriculture Resources	☑ Air Quality
☐ Biological Resources	☐ Cultural Resources	☑ Geology and Soils
☐ Hazards and Hazardous Materials	☑ Hydrology and Water Quality	☐ Land Use and Planning
☐ Mineral Resources	☐ Noise	☐ Population and Housing
☐ Public Services	☐ Recreation	☑ Transportation and Traffic
☐ Utilities and Service Systems	☐ Mandatory Findings of Significance	

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
1. AESTHETICS – Would the project:				
a) Have any substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑
2. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☑	☐
b) Conflict with existing zoning for agricultural use, or Williamson Act contract?	☐	☐	☐	☑
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
3. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon the make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☑	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑
4. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance?	☐	☐	☐	☑
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑
5. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑
6. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss injury, or death involving:	☐	☐	☑	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☑
ii) Strong seismic ground shaking?	☐	☐	☐	☑
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑
7. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
8. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☑	☐	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support the existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☑
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☑
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
f) Otherwise substantially degrade water quality?	☐	☐	☐	☑
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☑
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑
9. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑
10. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑
11. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
12. POPULATION AND HOUSING -- Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
13. PUBLIC SERVICES -- Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☑
Fire protection?				
Police protection?				
Schools?				
Parks?				
Other public facilities?				
14. RECREATION -- Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b) Include recreational facilities or require the construction or expansion or recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☑
15. TRANSPORTATION AND TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☑	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Result in inadequate parking capacity?	☐	☐	☐	☑
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑
16. UTILITIES AND SERVICE SYSTEMS -- Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☑
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑

17. MANDATORY FINDINGS OF SIGNIFICANCE --
Does the project:

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b) Have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)?	☐	☑	☐	☐
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

DETERMINATION

On the basis of this initial evaluation:

__X__ I find that the proposed Basin Plan Amendment could not have a significant effect on the environment.

____ I find that the proposed Basin Plan Amendment could have a significant adverse effect on the environment. However, there are feasible alternatives and/or feasible mitigation measures that would substantially lessen any significant adverse impact. These alternatives are discussed in the attached written report.

____ I find that the proposed Basin Plan Amendment may have a significant effect on the environment. There are no feasible alternatives and/or mitigation measures available which would substantially lessen any significant adverse impacts. See attached written report for a discussion of this determination.

_____ _____

PHIL GRUENBERG Date
Executive Officer

ENVIRONMENTAL CHECKLIST DISCUSSION

This section contains a:

(a) project description
(b) water body and area description
(c) analysis of likely BMPs
(d) detailed discussion of each major area of the Environmental Checklist, covering the Potentially Significant Impact, Less Than Significant Impact With Mitigation, Less Than Significant Impact, and No Impact categories

For the purpose of this CEQA Checklist and Determination, the “proposed project” includes the amendment, the reasonably foreseeable actions (i.e., BMPs) to be implemented by responsible parties, and the TMDL compliance monitoring actions.

The following discussion fulfills requirements of California Code of Regulations Title 23, Section 3777, subdivision (a)(1) through (3); Public Resources Code section 21159, subdivision (a)(1) through (3); and California Code of Regulations Title 14, section 15187, subdivisions (b) and (c)(1) through (3). More explicitly, this document provides an analysis of reasonably foreseeable environmental impacts resulting from project implementation. Where appropriate, the evaluation also includes an analysis of feasible reasonably foreseeable mitigation measures that would avoid or eliminate identified impacts.

Project Description
The proposed project is an amendment to the Water Quality Control Plan for the Colorado River Basin Region (Basin Plan) that will establish the Sedimentation/ Siltation Total Maximum Daily Load (TMDL) for Imperial Valley Drains: Niland 2, P, and Pumice, and Implementation Plan. This TMDL applies to Imperial Valley drains (Niland 2, P, and Pumice) and their tributary drains (Vail 4A, Vail 4, Vail 3A, Vail 3, and Vail 2A feed into Pumice). These drains total 39 miles long, and are referred to in this document as "subject drains". Niland 2, P, and Pumice drains empty directly into the Salton Sea. (Drains that empty into the Alamo River and New River are covered under previous TMDLs for those rivers.) "Project area" refers to the subject drains’ 39 miles of canals and the surrounding farmland that drains into them.

As required by Section 13242 of the Porter-Cologne Water Quality Act, the proposed amendment also incorporates a TMDL Implementation Plan that includes:

(a) a description of actions to be taken to achieve the TMDL, including recommended actions,
(b) time schedules for actions to be taken, and
(c) compliance monitoring activities.

A TMDL is the maximum amount of a pollutant that a water body can receive while it still meets water quality objectives (narrative or numerical) designed to protect beneficial uses, pursuant to 40 Code of Federal Regulations (CFR) 130.2(d), and California Water Code (CWC) 13241. The designated beneficial uses of Imperial Valley Drains include: warm freshwater habitat (WARM); wildlife habitat (WILD); preservation of rare threatened, or endangered species (RARE); contact- and non-contact water recreation (REC I and REC II); and freshwater replenishment

(FRSH) (California Regional Water Quality Control Board as amended to date). REC I and REC II usage is unauthorized in the Imperial Valley Drains, even though it occurs there.

The Basin Plan includes narrative water quality objectives that apply to sediment (suspended solids, sediment, turbidity) for all surface waters in the Region, including the subject drains. Violation of these objectives indicates that beneficial uses are impaired.

The TMDL's purpose is to eliminate sediment-caused impairments on the subject drains' beneficial uses. Excess sediment in the water column and in bottom deposits adversely affects aquatic and terrestrial organisms. Sediment also serves as a carrier for DDT, DDT metabolites, and other insoluble pesticides including toxaphene. These deposits and chemicals pose a threat to aquatic and avian communities and people feeding on fish.

The main source of excess sediment to the subject drains is agricultural runoff from farmland. The subject drains are owned and operated by the Imperial Irrigation District (IID). Most sediment in drains comes from agricultural tailwater, which is applied irrigation water that does not percolate into soil, thereby exiting at the lower end of the field, into an IID drain. IID periodically dredges to reduce sediment buildup in drains. Such activity can cause excess sediment to be flushed downstream.

The amendment will require responsible parties to utilize sediment-control Best Management Practices (BMPs). The proposed time schedule outlined in the TMDL Implementation Plan occurs in four phases with interim numeric targets and corresponding load allocations, and requires full compliance by the year 2013. The proposed Basin Plan Amendment:

1. Updates references to the State's Nonpoint Source Pollution Control Program.
2. Includes Regional Nonpoint Source Control Program elements.
3. Deletes dated information that is no longer accurate.
4. Establishes a numeric target of 200 milligrams per liter of total suspended solids.
5. Adds a section for this proposed TMDL that:
    a. Summarizes TMDL elements, including the Problem Statement, Numeric Target, Source Analysis, Margin of Safety, Seasonal Variations and Critical Conditions, Loading Capacity, and Load Allocations and Wasteload Allocations;
    b. Establishes interim numeric targets;
    c. Designates responsible parties and management actions;
    d. Lists recommended Best Management Practices (BMPs) to control sediment, with estimated implementation costs and financing sources;
    e. Describes recommended actions for cooperating agencies;
    f. Describes TMDL compliance monitoring and enforcement activities;
    g. Describes Regional Board water quality monitoring and implementation tracking activities to assess TMDL implementation;
    h. Describes public reporting activities; and
    i. Describes the Regional Board review process.

Water Body and Area Description

A 1,668-mile system of main and lateral canals delivers water to 500,000 acres of Imperial Valley farmland (Imperial Irrigation District 1998). Agricultural tailwater that exits the farmland is conveyed by about 1,500 miles of drains into the Alamo River or New River (and eventually into the Salton Sea), or into the Salton Sea directly. The subject drains are important habitat for

birds and other wildlife, whose native habitat has been drastically reduced due to human encroachment.

Imperial County covers about 4,597 square miles (2,942,080 acres) (Imperial County 1998). About 74% of County lands are undeveloped desert and mountain areas, mostly under Federal or State ownership. About 17% of County lands are irrigated for agriculture, totaling over 500,000 acres located mostly in the Imperial Valley. The Salton Sea covers about 8% of the County. Developed areas (e.g., communities) occupy less than 1% of County land.

Likely Dredging Mitigations

At the time of this analysis, it was uncertain what measures IID may implement to mitigate for dredging operations to ensure TMDL compliance. Options include reducing the amount and frequency of dredging, and implementing appropriate seasonal dredging restrictions (i.e., outside of the nesting season from approximately September to February) to avoid impacts on sensitive resources. Because of the uncertainty, the proposed Basin Plan Amendment requires IID to submit a Drain Water Quality Improvement Plan (DWQIP) that details a sediment-control and monitoring program for its drains, pursuant to Section 13267 of the California Water Code. The program, in part, must identify proposed control measures and a time schedule for implementation. The IID is a "Public Agency" as defined by state law (PRC 21063), and acts as a Lead Agency for its projects to comply with CEQA requirements (PRC 21159.2, State CEQA Guidelines 15189).

Likely BMPs

During TMDL development, the Silt TMDL Technical Advisory Committee (Silt TMDL TAC) and the University of California Cooperative Extension created two BMP lists, one for on-field and one for off-field sediment control. These lists are the basis for the BMPs contained in the proposed amendment. Most sediment-control BMPs work by slowing the velocity of irrigation water runoff and/or making the field or drain more resistant to erosive forces. The listed BMPs are not prescriptive because California law prohibits the Regional Board from specifying design, location, type of construction, or particular manner in which compliance may be had, pursuant to California Water Code (CWC) § 13360. Hence, the Basin Plan Amendment allows responsible parties to implement other non-listed BMPs, so long as law does not prohibit the BMPs.

At the time of this analysis, it was uncertain which BMPs farmers may choose to implement. However, a qualitative analysis was undertaken to identify those BMPs most likely to be implemented widely. The analysis was based on cost, effectiveness, and anticipated acceptability. A BMP was considered to be cost-effective if it was:

(a) rated as low in cost in the List of Agricultural Best Management Practices for the Imperial Valley (Jones & Stokes Associates 1996), or

(b) determined to increase total production costs by less than 1% for field crops and vegetables, and by about 2% for non-vegetable row-crops, in the Imperial Valley Drains Silt TMDL: Economic Impact Assessment (State Water Resources Control Board 2003).

BMP effectiveness was assessed using the effectiveness ratings in the List of Agricultural Best Management Practices for the Imperial Valley, recommendations of the U.C. Cooperative Extension, the Silt TMDL Technical Advisory Committee, and professional judgment. BMP

anticipated acceptability was determined based on communication with Imperial Valley farmers, the Silt TMDL TAC, and the Imperial Irrigation District, as well as whether a BMP has been or is being used by local farmers. Table 1 summarizes the results of the BMP evaluation.

Table 1. BMP Evaluation

Best Management Practice	Cost-Effective?	Effective in Reducing Silt?	Anticipated Acceptability	Widespread Implementation Likely?
On-Field				
Maintenance of Field Drainage Structure (Imperial Irrigation District Regulation No. 39)	Yes	Yes	Yes	Yes
Tailwater Drop Box with Raised Grade Board	Yes	Yes	Yes	Yes
Improved Drop Box with Widened Weir and Raised Grade Board	Yes	Yes	Yes	Yes
"Pan Ditch" (Enlarged Tailwater Ditch Cross Section)	Yes	Yes	Yes	Yes
Tailwater Ditch Checks or Check Dams	Yes	Yes	Yes	Yes
Field to Tailditch Transition	Yes	Yes	Yes	Yes
Furrow Dikes (C-Taps)	Yes	Yes	Yes	Yes
Filter Strips	Yes	Yes	Yes	Yes
Irrigation Water Management	Yes	Yes	No	No
Irrigation Land Leveling	No	Yes	Yes	No
Sprinkler Irrigation	No	Yes	Yes	No
Drip Irrigation	No	Yes	Yes	No
Reduced Tillage	Yes	No	Yes	No
Off-Field				
Channel Vegetation/ Grassed Waterway	Yes	Yes	Yes	Yes
Irrigation Canal or Lateral	Yes	Yes	Yes	Yes
Sedimentation Basins	No	Yes	Yes	No

Farmers are likely to select BMPs that are cost-effective (affordable), effective in reducing silt, and acceptable to them (e.g., without significant risk of harm to crops or soils). Therefore, the BMPs likely to have widespread implementation are: maintenance of field drainage structure (Imperial Irrigation District Regulation No. 39); tailwater drop box with raised grade board; improved drop box with widened weir and raised grade board; "pan ditch" (enlarged tailwater ditch cross section); tailwater ditch checks or check dams; field to tailditch transition; furrow dikes (C-taps); filter strips; channel vegetation/ grassed waterway; and irrigation canal or lateral. The environmental analysis in this document is based on the potential widespread implementation of these BMPs in the project area.

Detailed Discussion of the Environmental Checklist

I. Aesthetics

Would the project:

a) Have any substantial adverse effect on a scenic vista?

No Impact. The proposed project will not have a substantial adverse effect on a scenic vista. BMP implementation and compliance monitoring is expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. This agricultural land is not sensitive with respect to scenic vistas. Reduced sediment levels in the subject drains themselves will not affect such resources.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project will not substantially damage scenic resources within a state scenic highway. BMP implementation and compliance monitoring is expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. This agricultural land is not sensitive with respect to scenic resources. Reduced sediment levels in the subject drains themselves will not affect such resources.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings. BMP implementation and compliance monitoring is expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. This agricultural land is not sensitive with respect to visual character or quality. Reduced sediment levels in the subject drains themselves will not affect such resources.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. The proposed project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. BMP implementation and compliance monitoring will occur mostly in daylight hours, using standard non-glaring machinery (e.g., tractors, backhoes).

II. Agriculture Resources

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less Than Significant Impact. The proposed project potentially may convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. Of the sixteen BMPs recommended by the Silt TMDL TAC and the University of California Cooperative Extension, only three BMPs (filter strips, pan ditch, and sedimentation basins) require the conversion of any amount of land. Two of these BMPs are discussed below in relation to the amount of land they would remove from agricultural production. The third BMP (sedimentation basins) is not likely to be implemented because of cost (Table 1).

A typical tailwater ditch in Imperial County is about 5 feet for an 80-acre field (i.e., 2,900-foot by 1,200-foot field). To implement the filter strip BMP, the tailwater ditch would have to be widened by about another 15 feet to reach a total width of 20 feet (Sojka 1996). This amounts to about one acre (15 ft x 2,900 ft = 43,500 ft^2) per 80-acre field that would be removed from agricultural production. (One acre = 43,560 ft^2) Of the 10,463 acres of farmable land in the project area, approximately 5,487 acres are planted on any given year with alfalfa and sudan grass. The filter strip for these crops would consist of the same crop and, therefore, there is no conversion of land to non-agricultural use (i.e., the filter strip can be harvested) if filter strips are used for this acreage. Subsequently, there is no adverse impact on this acreage. Filter strips for the remaining 4,976 acres could result in the conversion of about 62 acres ((1 acre converted / 80 acres) x 4,976 acres = 62 acres converted) to non-agricultural use.

As stated in the paragraph above, a typical tailwater ditch in Imperial County is about 5 feet wide for an 80-acre field (i.e., 2,900-foot by 1,200-foot field). To implement the pan ditch (widened tailwater ditch) BMP, the tailwater ditch would have to be widened by about another 10 feet to reach a total width of 15 feet (Cocke 2001). This amounts to about 0.67 acres (10 ft x 2,900 ft = 29,000 ft^2 , then 29,000 ft^2 / (43,560 ft^2 / acre) = 0.67 acre) per 80-acre field that would be removed from agricultural production. It is unlikely that this pan ditch BMP will be chosen for the 5,487 acres planted with alfalfa and sudan grass, because the filter strip BMP described above would allow harvest of the filter strip, thus keeping all land in production. Pan ditches for the remaining 4,976 acres could result in the conversion of about 42 acres ((0.67 acre converted / 80 acres) x 4,976 acres = 42 acres converted) to non-agricultural use.

Hence, a combination of 50% filter strips and 50% pan ditches for 4,976 acres (i.e., acres not planted with alfalfa and sudan grass) could result in the conversion of 52 acres ((62 acres + 42 acres) / 2 BMP methods = 52 acres) to non-agricultural use. This equates to 0.5% of farmable land in the project area ((52 acres converted / 10,463 acres farmable land) x 100 = 0.5%). A substantial number of responsible parties most likely will choose other BMPs (e.g., tailwater drop box with raised grade board, improved drop box with widened weir and raised grade board, tailwater ditch checks) that do not remove farmland from crop production. Therefore, in practice, less than 0.5% of farmland likely will be converted to non-agricultural use. This impact is considered less than significant.

b) Conflict with existing zoning for agricultural use, or Williamson Act contract?

No Impact. The proposed project does not conflict with existing zoning for agricultural use, or the California Land Conservation Act known as the Williamson Act.

c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

No Impact. The proposed project does not involve other changes in the existing environment which could result in conversion of Farmland to non-agricultural use.

III. Air Quality

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The proposed project does not conflict with or obstruct implementation of the applicable air quality plan.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The proposed project may violate air quality standards or contribute substantially to an existing or projected air quality violation. Particulate emissions and ozone in Imperial County exceed Federal and State Ambient Air Quality Standards (California Air Resources Board 2002). Particulate emissions and ozone are due to: (a) extensive disturbances of dry soil from agriculture and off-road vehicles, (b) pollutant transfer from the South Coast Air Basin, (c) industrial activities in the City of Mexicali, Mexico, where pollutants blow into the Imperial Valley, and (d) nocturnal air stagnation and ground-based temperature inversions. (Inversions lead to poor air quality at night that continues over into early morning.)

BMPs themselves are not sources of emissions. However, construction, operation, and maintenance of some BMPs (e.g., filter strips, sprinkler irrigation, drip irrigation, channel vegetation/ grassed waterway) may involve the temporary use (one-time or once-per-year) of construction equipment (e.g., tractors, backhoes) that are sources of gasoline/diesel byproduct emissions and fugitive dust emissions (particulates). However, some BMPs (e.g., sprinkler irrigation, drip irrigation) are unlikely to be implemented significantly because of cost (Table 1). Further, the Imperial County Air Pollution Control District (ICAPCD) reports that the equipment used for construction and operation and management (O&M) meets emission standards and is exempted from ICAPCD permitting requirements. Therefore, construction equipment emissions are expected to result in less than significant air quality impacts.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The contribution attributable to the proposed project is not considered cumulatively considerable and, as a consequence, is less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. The proposed project will not expose sensitive receptors to substantial pollutant concentrations. Particulate emissions associated with BMP construction and O&M mostly will occur in agricultural drains and fields where large numbers of people are not expected to congregate.

e) Create objectionable odors affecting a substantial number of people?

No Impact. The proposed project will not create objectionable odors.

IV. Biological Resources

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. The proposed project will not have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

The subject drains support over ninety special status wildlife species, including sixteen threatened and/or endangered species (see Natural Environment Study). The subject drains provide valuable vegetation cover and are used as habitat by numerous sensitive bird species, including the endangered Yuma clapper rail (Setmire 1995), and the endangered Desert pupfish (Salton Sea Authority 1999). Reduction of sediment to the subject drains will not alter this important vegetation cover.

The mouths of Imperial Valley drains (i.e., where the drains empty into the Salton Sea) also are used by wildlife. However, these small areas of sediment/silt deposition do not provide the same protection from predators as do the delta areas at the mouths of the Alamo and New Rivers. Reduction of sediment to the subject drains may reduce the amount of sediment/silt at drains mouths, but will have no effect on biological resources, who prefer to use delta areas instead.

Reduction of sediment to the subject drains is anticipated to have an overall beneficial impact on biological resources within and downstream of drains. Silt deposition can result in smothering of some bottom-dwelling species, eggs, and larvae of fish and aquatic invertebrates. Sediment from agricultural drains serves as a carrier for pesticides such as DDT, DDT metabolites, and toxaphene. These pesticides accumulate in sediments and undergo biomagnification through the food chain. Imperial Valley fish routinely contain Total DDT levels exceeding the National Academy of Sciences (NAS) recommended maximum concentration and U.S Food and Drug Administration (FDA) action level, and are considered hazardous to the

wildlife and people who consume them. Deleterious reproductive effects of DDT include decreased egg production, eggshell thinning (and thus, breakage), increased chick mortality, and decreased fledgling success. Toxaphene is a known carcinogen, and like DDT, damages cells by disrupting important enzymatic and biochemical processes.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. The proposed project will not have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

The subject drains support riparian habitat and components of other sensitive natural communities, specifically wetland and mudflat communities (see Natural Environment Study). Riparian habitat is spaced intermittently along the subject drains, and provides valuable vegetation cover for numerous sensitive bird species, including the endangered Yuma clapper rail (Setmire 1995), and the endangered Desert pupfish (Salton Sea Authority 1999). Reduction of sediment to the subject drains will not alter this important vegetation cover.

The mouths of Imperial Valley drains (i.e., where the drains empty into the Salton Sea) support small areas of sediment/silt deposition that contain components of wetland and mudflat communities. However, these sediment/silt areas are marginal habitat, as they do not provide the same protection from predators as do the delta areas at the mouths of the Alamo and New Rivers. Reduction of sediment to the subject drains may reduce the amount of sediment/silt at drains mouths, but will have no effect on the true sensitive natural communities located at the Alamo and New River delta areas.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. The proposed project will not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

The mouths of Imperial Valley drains (i.e., where the drains empty into the Salton Sea) support small areas of sediment/silt deposition that contain components of wetland and mudflat communities. However, these sediment/silt areas are marginal habitat, as they do not provide the same protection from predators as do the delta areas at the mouths of the Alamo and New Rivers. Reduction of sediment to the subject drains may reduce the amount of sediment/silt at drains mouths, but will have no effect on the true sensitive natural communities located at the Alamo and New River delta areas.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The proposed project will not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy ordinance?

No Impact. The proposed project does not conflict with any local policies or ordinances protecting biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The Imperial Irrigation District (IID) currently is working with the U.S. Fish and Wildlife Service and the California Department of Fish and Game on a Habitat Conservation Plan to mitigate for impacts associated with the Colorado River Water Quantification Settlement Agreement.

V. Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. The proposed project will not cause a substantial adverse change in the significance of historical resources. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such historical resources already would be identified and protected if they occur on-site. Reduced sediment levels in the subject drains themselves will not affect such resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

No Impact. The proposed project will not cause a substantial adverse change in the significance of archaeological resources. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such archaeological resources already would be identified and protected if they occur on-site. Reduced sediment levels in the subject drains themselves will not affect such resources.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. The proposed project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such paleontological or geologic resources already would be identified and protected if they occur on-site. Reduced sediment levels in the subject drains themselves will not affect such resources.

d) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. The proposed project will not disturb any human remains, including those interred outside of formal cemeteries. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. Any such interred human remains already would be identified and protected if they occur on-site. Reduced sediment levels in the subject drains themselves will not affect such resources.

VI. Geology and Soils

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss injury, or death involving:
   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
   ii) Strong seismic ground shaking?
   iii) Seismic-related ground failure, including liquefaction?
   iv) Landslides?

Less Than Significant Impact. The proposed project potentially may expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic activity. However, the impact is considered less than significant.

Imperial Valley is one of the most active seismic zones in North America, with numerous historic earthquakes. The Valley experiences continuous low-to-moderate level seismic activity. The Great San Andreas Fault lies near the project area. A Richter scale magnitude 8 earthquake might occur once per 160 years, a magnitude 7 every thirteen years, a magnitude 4 every ten years, and a magnitude 3 about ten to twenty times per year. The area had two magnitude 6 quakes in 1987. Additionally, some areas in the Valley have a perched groundwater table. The combination of loose, fine sediments, high groundwater, and a potential for seismic activity create a potential for soil liquefaction. Therefore, the potential for structural failure is inherently considerable for the area.

BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. The BMPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). People implementing BMPs may be exposed to seismic activity because of their presence in an earthquake-prone area, but no more so than they would have been without BMP implementation. Therefore, the proposed project will not result in significant soil disturbances that would result in fault rupture, strong seismic ground-shaking, seismic-related ground failure, or landslides. Rather, the proposed project will have a less than significant impact.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact. The proposed project will not result in substantial soil erosion or the loss of topsoil. The objective of the proposed project is to control excess delivery of sediment/silt from irrigated agricultural fields into the subject drains. Implementation of BMPs will reduce soil erosion and the loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. The BMPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The BMPs that are likely to be implemented do not involve structures that would affect or disturb soils to any significant degree such that the soils would become unstable, result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been cultivated for at least the last 60 years. The BMPs are not individually or cumulatively significantly different than current agricultural practices (e.g., preparing land for planting). The BMPs that are likely to be implemented would not affect soil to any significant degree such that they would create a substantial risk to life or property.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The proposed project does not involve septic tanks or alternative wastewater disposal systems.

VII. Hazards and Hazardous Materials

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. The proposed project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. The proposed project does not involve use of hazardous materials.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact. The proposed project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The proposed project does not involve use of hazardous materials.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The proposed project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The proposed project does not involve use of hazardous materials.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed project will not be located on sites which are included on a list of hazardous materials sites that would result in creation of a significant hazard to the public or the environment. BMP implementation and compliance monitoring are expected to occur on existing fields and drains, which are not identified as hazardous materials sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport. BMP implementation and compliance monitoring are expected to occur on existing fields and drains.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project is not located within the vicinity of a private airstrip. BMP implementation and compliance monitoring are expected to occur on existing fields and drains.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. BMP implementation and compliance monitoring are expected to occur on existing fields and drains, which generally are not corridors for emergency response or evacuation.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The proposed project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. BMP implementation and compliance monitoring are expected to occur on existing fields and drains that are not adjacent to urbanized areas or residences.

VIII. Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact with Mitigation. The proposed project may violate water quality standards or waste discharge requirements. However, this can be reduced to a less than significant impact with mitigation. For the purpose of this subsection, impacts are considered significant if they result in violation of water quality standards or waste discharge requirements. A water quality standard for a water body is defined as a particular beneficial use of the water body and the water quality objective(s) (WQOs) necessary to protect the beneficial use. WQOs can be numeric (e.g., “Dissolved oxygen concentrations shall not be reduced below 5.0 mg/L for any river with a designated WARM beneficial use.”) or narrative (e.g., “The suspended sediment load and suspended sediment discharge rate to surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.”). The Regional Board’s Clean Water Act Section 303(d) List of Impaired Water Bodies documents the pollutants/stressors associated with each listed water body in the Region, including the Imperial Valley drains (Table 2).

Table 2. Pollutant/Stressors of the Imperial Valley Drains

Water Body	Pollutant/Stressor
Imperial Valley Drains	Silt, Pesticides, Selenium

(California Regional Water Quality Control Board 2003)

Provisions of the California Water Code authorize the Regional Board to adopt Waste Discharge Requirements (WDRs) from point and nonpoint sources of pollution. WDRs for discharges from point sources are termed National Pollutant Discharge Elimination System (NPDES) permits. Currently, zero wastewater treatment plants (WWTPs) and zero power-generating stations discharge into the subject drains. Therefore, such facilities are not a source of suspended solids in the Imperial Valley drains.

Currently, discharges of wastes from nonpoint sources (e.g., agricultural runoff) are not under WDRs. The proposed amendment will include a conditional prohibition of sediment discharge unless the discharge is either in compliance with applicable TMDL(s), including implementation provisions, or WDRs. Additionally, the Regional Board will continue to use its tiered approach to control degradation caused by nonpoint sources. The proposed project is consistent with that approach. The Regional Board will be implementing a comprehensive water quality monitoring program as part of this project to track water quality changes.

BMP implementation may alter the composition of water in drains by reducing tailwater flows. Nearly 100% of discharges in the subject drains are from agricultural sources, with tailwater accounting for 48% of discharges (Table 3). Therefore, tailwater currently helps to dilute tilewater, which carries excess selenium, salt, and nutrients load into the watershed. Accordingly, a reduction in tailwater may increase these pollutants in the subject drains. However, tailwater discharge for the sole purpose of diluting current pollutants found in tilewater will not achieve compliance with State WQS. Subsequently, significant impacts on water quality (i.e., significant increases of pollutant concentrations in the subject drains) are unlikely as a result of implementing the proposed TMDL. The 1987 through 1996 average annual discharges to the New River, Alamo River and Imperial Valley drains are summarized by source in Table 3.

Table 3. 1987-1996 Average Annual Discharges to the New River, Alamo River, and Imperial Valley Drains by Source

Source*	Acre-feet	Percent
Operational Spill	123,018	12
Tailwater	479,661	48
Tilewater	261,278	26
Seepage	128,165	13
Total	992,122	100

(Jensen and Walter 1997)

* An operational spill is the quantity of fresh water that reaches the terminal end of an irrigation canal, but is not applied to the fields, and therefore is diverted into a drain. Tailwater, or surface runoff, is irrigation water that does not percolate into the soil, and exits the lower end of the field into the drain. Tailwater tends to erode fields and thus acquire sediment/silt as it crosses and exits a field. Tilewater, or subsurface drainage, is water that has percolated through the soil, but is not absorbed by crops. Tilewater flushes salts from the soil. This highly saline water accumulates in tile lines beneath the fields, wherein it is transported to drains by gravity flow or a sump system. Seepage denotes subsurface water that enters a drain due to a hydraulic gradient resulting primarily from loosing irrigation canals.

BMPs that are likely to be implemented (Table 1) were analyzed to determine the effects they might have on the volume of agricultural tailwater discharges. Table 4 summarizes the result of that analysis. As Table 4 indicates, widespread implementation of these BMPs would result in a minor to negligible reduction in the volume of tailwater discharged to drains.

Table 4. BMP Effects on Volume of Agricultural Tailwater Discharges

Best Management Practice	Potential for Tailwater Flow Reduction
Imperial Irrigation District Regulation No. 39	Negligible
Tailwater Drop Box with Raised Grade Board	Negligible
Improved Drop Box with Widened Weir and Raised Grade Board	Negligible
"Pan Ditch" (Enlarged Tailwater Ditch Cross Section)	Negligible
Tailwater Ditch Checks or Check Dams	Minor
Field to Tailditch Transition	Negligible
Furrow Dikes (C-Taps)	Minor
Filter Strips	Negligible
Channel Vegetation / Grassed Waterway	Negligible
Irrigation Canal or Lateral	Negligible

(Jones & Stokes Associates 1996, U.S. Department of Agriculture 1996)

IID routinely conducts dredging operations at Imperial Valley drains to remove sediment/silt, in order to maintain a stable water surface elevation, prevent bank erosion, and prevent upstream flood damage to adjacent agricultural lands. IID removes about 2,467 tons/year of sediment from the subject drains. Dredging operations have water quality impacts, including significant increases in turbidity.

The proposed project is expected to reduce the current annual mean suspended solids concentration in the subject drains at their outlets with the Salton Sea by about 52%, from the current 418 mg/L down to the target 200 mg/L. This corresponds to a sediment load reduction of about 16,744 tons/year, from the current 29,669 tons/year down to the target 12,925 tons/year (i.e., assimilative capacity). This reduction of sediment/silt by IID dredging operations could result in a significant decrease in the inputs of sediment/silt at the mouths of the drains.

Mitigation Measures. Mitigation measures include: (a) reduction of dredging at the mouths of drains, (b) dredging conducted outside of the nesting season (i.e., from approximately September-February), and (c) IID submittal of a Drain Water Quality Improvement Plan (DWQIP) pursuant to Section 13267 of the California Water Code describing measures it proposes to take (e.g., decrease dredging) along with a monitoring program, to ensure that dredging operations do not result in habitat loss as a result of TMDL implementation.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support the existing land uses or planned uses for which permits have been granted)?

No Impact. The proposed project does not involve the extraction or recharge of groundwater supplies. The surface waters involved with this project do not recharge any groundwater aquifers that are of significant value in terms of their beneficial uses.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

No Impact. The proposed project does not require alteration of the existing drainage pattern of the site or area, and would not result in substantial erosion or siltation on- or off-site. Rather, the proposed project expects to reduce excess delivery of sediment/silt to surface waters by implementing BMPs that minimize erosion and sediment deposition.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No Impact. The proposed project does require alteration of the existing drainage pattern of the site or area, and would not result in a substantial increase in the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. Alteration of drainage patterns (e.g., re-routing surface waters, increasing paved areas, increasing agricultural runoff) is not a foreseeable method of compliance with the TMDL.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. The proposed project will not create or contribute runoff water. Rather, the proposed project expects to reduce runoff from agricultural fields, thereby reducing substantial additional sources of pollution.

f) Otherwise substantially degrade water quality?

No Impact. The proposed project will not otherwise substantially degrade water quality. Rather, the proposed project expects to improve water quality conditions by reducing excess sediment.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project will not place housing within a 100-year flood hazard area.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. The proposed project will not place structures which would impede or redirect flood flows anywhere within a 100-year flood hazard area.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The proposed project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or mudflow.

IX. Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact. The proposed project will not physically divide an established community. BMP implementation and compliance monitoring are expected to occur on existing fields and drains, and will not result in any land use or planning impacts.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed project will not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. BMP implementation and compliance monitoring are expected to occur on existing fields and drains, and will not result in any land use or planning impacts.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project will not conflict with any applicable habitat conservation plan or natural community conservation plan.

X. Mineral Resources

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The proposed project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been under cultivation for at least the last 60 years.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The proposed project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. BMP implementation and compliance monitoring are expected to occur on existing agricultural drains and on farmland that has been under cultivation for at least the last 60 years.

XI. Noise

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan ordinance, or applicable standards of other agencies?

No Impact. The proposed project will not result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan ordinance, or applicable

standards of other agencies. Construction and/or installation of some BMPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may emit noise at levels greater than 60 decibels. However, such activities will occur on farmland not typically surrounded by people. Once installed, the BMPs themselves are not sources of significant noise.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

No Impact. The proposed project will not result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels. Construction and/or installation of some BMPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may emit groundborne vibration or noise. However, such activities will occur on farmland not typically surrounded by people. Once installed, the BMPs themselves are not sources of significant groundborne vibration or noise.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Construction and/or installation of some BMPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may increase ambient noise levels in the area. However, such activities will occur on farmland not typically surrounded by people. Once installed, the BMPs themselves are not sources of significant permanent ambient noise.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed project will not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Construction and/or installation of some BMPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may increase noise levels, but these noise levels will not be above typical levels from daily farming operations. Additionally, such activities will occur on farmland not typically surrounded by people. Once installed, the BMPs themselves are not sources of temporary or periodic increases in ambient noise.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within an airport land use plan or within two miles of a public airport or public use airport.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within the vicinity of a private airstrip.

XII. Population and Housing

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project will not induce substantial population growth in an area, either directly or indirectly. BMP implementation will not involve construction of buildings or infrastructure.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. BMP implementation will not necessitate removal of housing.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. BMP implementation will not necessitate displacement of people.

XIII. Public Services

Would the project:

(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?
Police protection?
Schools?
Parks?
Other public facilities?

No Impact. The proposed project will not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times, or other performance objectives for public services.

XIV. Recreation

Would the project:

(a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The proposed project will not increase the use of existing neighborhood and regional parks or other recreational facilities. BMP implementation will not increase park or recreational facility use.

(b) Include recreational facilities or require the construction or expansion or recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project will not include recreational facilities or require the construction or expansion of recreational facilities. BMP implementation will not include or require recreational facility use.

XV. Transportation and Traffic

Would the project:

a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Less Than Significant Impact. The proposed project potentially may cause an increase in traffic which is substantial to the existing traffic load and capacity of the street system. However, the impact is considered less than significant.

Construction and/or installation of some BMPs may involve the temporary use of farming and construction equipment (e.g., tractors, backhoe, caterpillars) that may increase the traffic load. However, transportation and movement of farming equipment is common on roads and highways serving the area where BMPs are to be implemented. Potential traffic congestion may occur temporarily in isolated areas, but is expected to have a less than significant impact. Once installed, the BMPs themselves will not cause traffic impacts.

b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

No Impact. The proposed project will not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. Construction and/or installation of some BMPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on the roads and highways serving the area where BMPs are to be implemented. Potential traffic congestion may occur temporarily in isolated areas, but is not expected to exceed a level of service standard for designated roads or highways.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project will not result in a change in air traffic patterns. BMP implementation does not involve or affect air traffic.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project will not substantially increase hazards due to design features or incompatible uses. Construction and/or installation of some BMPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on the roads and highways serving the area where BMPs are to be implemented, thus not causing an incompatible use hazard.

e) Result in inadequate emergency access?

No Impact. The proposed project will not result in inadequate emergency access. Construction and/or installation of some BMPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, transportation and movement of farming equipment is common on the roads and highways serving the area where BMPs are to be implemented, thus not causing inadequate emergency access.

f) Result in inadequate parking capacity?

No Impact. The proposed project will not result in inadequate parking capacity. Construction and/or installation of some BMPs may require use of farming equipment (e.g., tractors, backhoe, caterpillars). However, BMPs are expected to occur on existing drains and farmland, where adequate space exists to park construction and/or installation equipment.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. The proposed project does not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks). BMP implementation does not involve or affect alternative transportation.

XVI. Utilities and Service Systems

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The proposed project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. BMP implementation does not involve wastewater treatment.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project will not require or result in construction of new water or wastewater treatment facilities or expansion of existing facilities. BMP implementation does not involve wastewater treatment.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The proposed project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities. BMP implementation does not involve storm water drainage facilities.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The proposed project has sufficient water supplies available to serve the project from existing entitlements and resources. The proposed project will not need new or expanded entitlements, either during or after BMP construction/installation.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. The proposed project will result in a determination by the wastewater treatment provider which serves the project area that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. BMP implementation does not involve wastewater treatment.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact. The proposed project does not involve landfills, and will not generate additional garbage to be accommodated by a landfill.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The proposed project complies with federal, state, and local statutes and regulations related to solid waste. BMP implementation does not involve solid waste.

XVII. Mandatory Findings of Significance

Does the project:

a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

No Impact. The proposed project will not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Rather, the proposed project is expected to improve the environment by reducing excess sediment/silt, thereby returning the area to a more natural state.

b) Have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact with Mitigation. The proposed project potentially may have impacts that are individually limited, but cumulatively considerable. However, this can be reduced to a less than significant impact with mitigation. Cumulative impacts are those that are beyond the impact of an individual project. Cumulative impacts are analyzed by looking at the individual project in connection with effects of past projects, effects of other current projects, and effects of probable future projects.

A proposed water transfer plan by the Imperial Irrigation District (IID) has a potentially significant cumulative impact upon biological resources in the subject drains. This water transfer plan would result in decreased flow in the subject drains (and other Imperial Valley waterways), should the water transfer be implemented as proposed.

The proposed water transfer plan involves an expected decrease in IIID irrigation deliveries of as much as 300,000 acre-feet/year. The water to be transferred would be irrigation water "conserved" by IID and Imperial Valley farmers. This water would be diverted to other water

agencies (e.g., San Diego County Water Authority). Assuming that the 300,000 acre-feet/year reduction in irrigation deliveries will result in an equal decrease in total drain flow as a worst case scenario, the impact would be significant upon wildlife populations and habitats in the subject drains.

The proposed water transfer plan must assess and mitigate impacts to sensitive species and habitats. This proposed TMDL will contribute in a minor way to cumulative effects in relation to the water transfer.

Mitigation Measures. Mitigation measures include those discussed in previous sections of this document.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact. The proposed project does not have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly. Rather, the proposed project is expected to reduce problems (e.g., unsafe fish consumption, nuisance odors from fish die-offs, pathogens from decaying fish) that may adversely affect human beings.

ALTERNATIVES DISCUSSION

No Action Alternative

The No Action Alternative is defined as no Regional Board adoption of a TMDL and corresponding Implementation Plan. This alternative means that the subject drains will continue to violate Basin Plan water quality objectives for sediment, suspended solids, and turbidity. Beneficial uses will continue to be impaired, and health of biological and human communities will continue to be at risk. This alternative also means that the subject drains will not be under the same sedimentation/ siltation standard as other Imperial Valley waterways (i.e., Alamo and New Rivers, and their tributary drains), despite similar farming practices along the subject drains. This alternative does not comply with the Clean Water Act or meet the purpose of the proposed action, which is to eliminate water quality problems. This alternative is not acceptable.

Preferred Alternative

The proposed Sedimentation/ Siltation TMDL (i.e., Preferred Alternative) has been the basis for all discussions in this CEQA Checklist and Determination. The Preferred Alternative is a feasible approach to decrease existing sediment loads in the subject drains, and thus to decrease health risks for biological and human communities. The Preferred Alternative calls for attainment of interim numeric targets in four phases, and requires full compliance within twelve years. This time schedule is moderately aggressive, yet reasonable. The time schedule provides responsible parties with necessary time to explore financial options and implement tasks. The proposed Implementation Plan utilizes a combination of self-determined actions (e.g., Imperial County Farm Bureau Voluntary Watershed Program) and regulatory-encouraged actions (e.g., IID development and implementation of a water quality monitoring program).

Alternative 2 -- Lower Numeric Target

The Lower Numeric Target Alternative (Alternative 2) is defined as the proposed project with a lower numeric target of 80 mg/L TSS concentration, proposed by the National Academy of Sciences as being moderately protective of aquatic communities (U.S. Environmental Protection Agency 1973). Meeting this lower numeric target would require a lower total load, and thus lower load allocations to agricultural dischargers in the watershed. This alternative would result in similar impacts to biological resources as the proposed project (Preferred Alternative), but the economic impacts to agriculture would be much greater as it would require the implementation of the most expensive BMPs.

Alternative 3 -- Increased Regulatory Oversight

The Increased Regulatory Oversight Alternative (Alternative 3) is defined as the proposed project with an Implementation Plan of greater regulatory oversight, including the adoption of conditional waivers, general permits, effluent limitations for the Imperial Irrigation District, and/or effluent limitations for individual responsible parties. This alternative would result in similar impacts to biological resources as the proposed project (Preferred Alternative), but could be unnecessarily burdensome on the regulated community, and unnecessarily exhaustive of limited Regional Board staff resources.

Comparison of Alternatives
Table 5 compares the alternatives.

Table 5. Comparison of Alternatives

Alternative	Impact on Agricultural Resources	Impact on Biological Resources	Impact on Water Quality	Objectives Met?
No Action	No effect	Adverse	Adverse	Objectives not met
Preferred Alternative	Less than significant	No effect	Less than significant	Objectives met
Alternative 2 (Lower Numeric Target)	Potentially significant	No effect	Less than significant	Objectives met in same time frame as Preferred Alternative
Alternative 3 (Increased Regulatory Oversight)	Less than significant	No effect	Less than significant	Objectives met in faster time frame than Preferred Alternative

REFERENCES

References Cited

California Air Resources Board. 2002. Links for 2000 Area Designations Maps / State and National. http://www.arb.ca.gov/desig/adm/adm.htm

California Regional Water Quality Control Board. 2003. Clean Water Act 303(d) List of Impaired Water Bodies Within the Colorado River Basin Region. California Regional Water Quality Control Board, Colorado River Basin Region. Palm Desert, CA

California Regional Water Quality Control Board. As amended to date. Water Quality Control Plan: Colorado River Basin – Region 7. California Regional Water Quality Control Board, Colorado River Basin Region. Palm Desert, CA

Cocke, M. 2001. Personal Communication between Mr. Nadim Zeywar, California Regional Water Quality Control Board, Colorado River Basin Region, and Mr. Mark Cocke, Northern California Natural Resource Conservation Service (Phone #: 530-792-5663)

Imperial County. 1998. Imperial County General Plan. CD-ROM Disc. Imperial County Planning Department, El Centro, CA

Imperial Irrigation District. 1998. IID Background. http://www.iid.com/aboutiid/iidbackground-facts.html

Jensen, M.E. and Walter, I.A. 1997. Assessment of 1986-1997 Water Use by the Imperial Irrigation District using Water Balance and Cropping Data. Special Report Prepared for the U.S. Bureau of Reclamation. Boulder City, NV

Jones & Stokes Associates. 1996. List of Agricultural Best Management Practices for the Imperial Irrigation District. Jones & Stokes Associates, Sacramento, CA

Salton Sea Authority. 1999. The Desert Pupfish of the Salton Sea: A Synthesis. Salton Sea Database Program. http://cem.uor.edu/salton/recon/pupfishSynthesisReport.html

Setmire, James. 1995. Selenium in Water, Sediment, and Transplanted *Corbicula* in Irrigation Drainage and Wildlife Use of Drains in the Imperial Valley, California 1994-1995. U.S. Bureau of Reclamation. Temecula, CA

Sojka, R.E. 1996. Management Options for Control of Irrigation-Induced Erosion. United States Department of Agriculture, Agricultural Research Service, Northwest Irrigation and Soils Research Laboratory, Kimberly, ID

State Water Resources Control Board. 2003. Imperial Valley Drains Silt TMDL: Economic Impact Assessment. Gerald Horner, Ph.D. State Water Resources Control Board. Sacramento, CA

United States Department of Agriculture. 1996. Field Office Technical Guide, Section IV. Natural Resources Conservation Service. Davis, CA

United States Environmental Protection Agency. 1973. Water Quality Criteria 1972. EPA-R3-73-033-March 1973. A Report of the Committee on Water Quality Criteria, Environmental Studies Board, National Academy of Sciences, National Academy of Engineering. U.S. Government Printing Office, Washington D.C., 1972